Abstract

The present invention relates to methods for producing a polypeptide, comprising: (a) cultivating a mutant of a parent filamentous fungal cell under conditions conducive for the production of the polypeptide, wherein (i) the mutant cell comprises a first nucleic acid sequence encoding the polypeptide and a second nucleic acid sequence comprising a modification of at least one of the genes involved in the production of a trichothecene and (ii) the mutant produces less of the trichothecene than the parent filamentous fungal cell when cultured under the same conditions; and (b) isolating the polypeptide from the cultivation medium. The present invention also relates to mutants of filamentous fungal cells and methods for obtaining the mutant cells. The present invention also relates to isolated trichodiene synthases and isolated nucleic acid sequences encoding the trichodiene synthases. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing the trichodiene synthases. The present invention further relates to mutants cells comprising a marker-free modification of a gene, and methods for obtaining and using such mutant cells.